UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

final

MAR 22 1993

Ref: 8RC

TO: Lowry Landfill De Minimis Settlors

The Administrative Order on Consent De Minimis Settlement, Docket No. CERCLA-VIII-93-04 ("AOC"), which you have duly executed and entered into, is hereby issued. Enclosed please find the following:

1) A copy of the final AOC signed by the United States Environmental Protection Agency (EPA) evidencing EPA's acceptance of, and consent to, this settlement; and

2) EPA's Response to Comments and copies of comments received pursuant to the November 18, 1992, Federal Register notice concerning this settlement, and as provided in Section V Paragraph 26 (Public Comment) of the AOC. The comments submitted did not raise any facts or considerations indicating the AOC is inappropriate, improper, or inadequate in any manner that would require EPA to modify or withdraw its consent to this settlement.

Pursuant to Section V Paragraph 27 of the AOC, this letter provides you written notice of the effective date of this AOC. The date of the issuance of this letter is the effective date of the AOC. Pursuant to Section V Paragraphs 1-3 of the AOC, each Non-Federal Respondent is instructed to pay the amount specified in Appendix A or B of the AOC within thirty days of this date, as required by the AOC. Pursuant to Section V Paragraph 4 of the AOC, each Federal Respondent is instructed to pay the amount in Appendix A or B within the time frame established in that section, as required by the AOC. Payment shall be made in the manner specified in the AOC.

Thank you for your cooperation and participation in resolving this matter.

Sincerely,

Robert L. Duprey, Director
Hazardous Waste Management Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

Ref: 8HWM-SR

RESPONSE TO COMMENTS RECEIVED
ON PROPOSED LOWRY DE MINIMIS SETTLEMENT

March, 1993

On November 18, 1992, notice was published in the Federal Register announcing the Environmental Protection Agency (EPA), Region VIII proposed de minimis settlement for the Lowry Landfill Superfund site. The notice provided for a 30-day comment period, ending on December 18, 1992. Four sets of comments were received by that deadline, on behalf of the following parties: (1) The City and County of Denver, Waste Management of Colorado, Inc., and Chemical Waste Management, Inc.; (2) Marathon Oil Company, ASARCO, Inc., and Martin Marietta Corporation; (3) Amax Research and Development, Inc.; and (4) Amax Research and Development, Inc., Conoco, Inc., and the S.W. Shattuck Chemical Company, Inc. EPA has reviewed those comments; the following will provide a summary of the comments, along with EPA's responses to those comments.

COMMENTORS

City and County of Denver (Denver), Waste Management of Colorado (WMC), Inc., and Chemical Waste Management (CWM), Inc.

SOURCE

December 18, 1992, one-page letter from the above-referenced parties to Nancy H. Mueller.

COMMENT

> "Denver, WMC, and CWM support EPA's settlement based on volume of waste disposed by each settlor and EPA's use of its list "PRPs at Lowry Landfill" also known as the "Waste-In-List" to establish the amount of each settling party's liability. The money obtained by EPA from the announced de minimis settlements should be applied to offset EPA's past costs at the Lowry Landfill Superfund site of $18,094,323.07 as of April 30, 1991."

EPA RESPONSE

EPA notes comment supporting EPA's de minimis settlement. The money obtained as a result of the settlement will be applied to EPA's past costs.

COMMENTORS

ASARCO Incorporated, Marathon Oil Company, and Martin Marietta Corporation

SOURCE

December 18, 1992, two-page letter with attachment from the above-named parties to Nancy H. Mueller.

COMMENT

"The enclosed comments support EPA's proposed settlement and request that EPA finalize the AOC and allow eligible de minimis parties to receive the statutory protections afforded thereunder."

EPA RESPONSE

EPA notes comment supporting EPA's de minimis settlement. The AOC will be finalized and eligible settling de minimis parties will be notified.

COMMENT

"The proposed settlement requires the 22 parties to together pay $633,789.78. These revenues can be immediately used for site cleanup."

EPA RESPONSE

Funds generated as a result of the settlement will be deposited into the Superfund Trust Fund to partially offset EPA past costs.

COMMENT

"As EPA is aware, in 1992, many de minimis parties entered into a settlement with Waste Management of Colorado, the Site's operator, regarding their Lowry liability. Thus, those parties are no longer involved in the Superfund process. Accordingly, the proposed AOC attempts to eliminate all remaining de minimis parties from the process and to resolve all their outstanding liability to EPA."

EPA RESPONSE

It is not true that those parties that entered into Waste Management of Colorado's settlement are "...no longer involved in the Superfund process." Although Waste Management may have indemnified those parties, they are still liable to EPA under §107 of CERCLA.

COMMENTOR Amax Research and Development, Inc.

SOURCE

December 18, 1992, two-page letter from the above-referenced party to Nancy H. Mueller.

COMMENT

"...the De Minimis Administrative Record cited in EPA's "Statement in Support of the Lowry Landfill De Minimis Settlement, Administrative Order on Consent, Docket No.: CERCLA-VIII-93-04" does not include Amax R&D's extensive comments to EPA on the proposed de minimis settlement submitted more than a year ago."

EPA RESPONSE

EPA received Amax's December 2, 1991, letter and included it in the De Minimis Administrative Record upon receipt as document number 20.02.007. After Amax's December 18, 1992, letter was received, the EPA Administrative Record was checked and the December 2, 1991, letter was found as indexed. It is unclear why Amax R&D was unable to locate the document in the Administrative Record.

COMMENT

"By letter dated December 2, 1991, Amax R&D submitted to EPA extensive and detailed analysis of information that had only just then been made available to the public."

"What this analysis showed was that organic solvents or their degradation products comprised the vast majority of the relative risks posed by all chemicals at the site, but were only a small percentage of the total volume of wastes disposed at the site. More importantly, it appeared that the group of PRPs EPA had indicated were eligible for a de minimis settlement were a major contributor of solvents at the site, despite their small total volumes. We have yet to receive a detailed response to our comments."

EPA RESPONSE

The information in the December 2, 1991, letter from Amax R&D was personally presented to EPA at a meeting attended by numerous representatives of both EPA and Amax. The stated purpose of the meeting was to discuss EPA's determination regarding eligibility for de minimis settlement based on relative toxicity. The information presented by Amax R&D was considered by EPA in reaching its determination regarding relative toxicity.

It is not apparent that organic solvents as a class comprise the vast majority of risks at the site. However, even if this is true, it really does not answer the question of whether a particular contributor of solvents should be disqualified from settling. The statute does not say that a party's waste stream cannot comprise part of a class of wastes that pose a majority of risks at a site. The statute requires a comparison of the toxic or other hazardous effects of the specific hazardous substances contributed by an individual party to the other hazardous substances at the facility. These "other hazardous substances" might include the same hazardous substances contributed by the individual party if they have also been contributed by other parties.

EPA compared the toxic and other hazardous effects of the hazardous substances sent to Lowry by each individual de minimis settlor (and each potential de minimis settlor) to the other hazardous substances sent to Lowry. While one of the solvents (vinyl chloride) reported to be disposed at Lowry is scored at 10,000 on the Hazard Ranking System (HRS), the other solvents reported scored less. Other hazardous substances disposed at Lowry also scored up to 10,000 on the HRS. Furthermore, other hazardous substances scoring 10,000 were contributed by both large and small volume contributors, and solvents in particular were contributed by both large volume and small volume contributors. EPA concluded that no individual settlor had contributed hazardous substances to the site having significantly greater toxic or other hazardous effects than other hazardous substances at the site. Thus, EPA believes it is reasonable to permit contributors of solvents to settle with the Agency in this de minimis settlement.

EPA recognizes that Amax and others may have a different view of what "toxic or other hazardous effects" means in the statute. However, in the context of a de minimis settlement, EPA does not believe it is required to perform a risk assessment to analyze the comparative toxic or hazardous effects of individual hazardous substances. EPA believes its reliance on pre-defined, objective measures of toxic and other hazardous effects, as reflected in the

toxicity scoring tables from the Hazard Ranking System, is a reasonable approach to evaluate the relative toxicity of an individual's hazardous substances vis-a-vis the other hazardous substances contributed to the site.

COMMENT

"...using the toxicity screening scores from the Hazard Ranking System ("HRS") does not reflect the statutory requirement that the "toxic or other hazardous effects" from the settling party's wastes are minimal in comparison to wastes from other PRPs at the site CERCLA, §122(g)(1)(A)(ii). Use of the HRS scoring criteria omits any consideration of (1) the total quantity of the hazardous substance (versus the total amount of wastes containing the hazardous substance,), (2) the concentration of the hazardous substance, or (3) the specific form of the hazardous substance. All of these factors are key to determining relative toxic "effects" at this particular site."

EPA RESPONSE

EPA evaluated relative toxicity based on the presence of a hazardous substance in a particular waste stream. Quantity, concentration or the specific form of the hazardous substance were not factors considered in EPA's evaluation. It is EPA's opinion that CERCLA does not require EPA to evaluate the factors Amax has listed to determine relative toxicity of hazardous substances for purposes of a de minimis settlement. EPA believes its use of the toxicity scoring tables from the Hazard Ranking System and the other aspects of its analysis of toxicity were reasonable.

COMMENTORS

Amax Research & Development, Inc., Conoco, Inc., and The S.W. Shattuck Chemical Company, Inc.

SOURCE

December 18, 1992, three-page letter from the above-referenced parties to Nancy H. Mueller.

COMMENT

The commentors indicate that the Administrative Order on Consent should be amended to clarify that any potential liability of federal settlors as owners and/or operators is not covered by the settlement. Commentors claim that some of the federal PRPs may be considered "owners" or "operators" with more than a de minimis share of

responsibility at the Site. Commentors ask that "matters addressed" by the settlement be defined to include only liability under section 107(a)(3) of CERCLA and that EPA's reservation of rights be expressly extended to any liability of a settlor as an owner or operator under section 107(a)(1) or (2) of CERCLA.

RESPONSE

EPA does not believe a change to the Administrative Order on Consent is necessary. EPA acknowledges that the United States owned the site property before the City and County of Denver. However, even if the Administrative Order on Consent could be construed to address owner and/or operator liability, EPA currently has no information showing that a federal settlor or any of the other settlors is liable for cleanup of the Lowry site as an "owner" or "operator" within the meaning of CERCLA. Furthermore, EPA believes the reopener, found at paragraph 17.e of the Order, protects non-settlors if new information is discovered which shows that any of the settlors is liable as an owner and/or operator. The Department of Justice agrees with this interpretation of the reopener provision.

COMMENT

"Commentors note that, while it may be appropriate for EPA to conclude settlements with certain parties based on these volume estimates, the mere fact that such settlements are negotiated and approved does not render EPA's estimates accurate or credible. Commentors assert that total waste volumes at the Site may well be different than the total volume reflected in EPA's waste-in volume estimate. Accordingly, Commentors assert that they reserve all rights to contest or dispute the EPA waste-in volume estimates attributed to them by the EPA list despite the use of the waste-in list as the basis for de minimis settlement."

"In addition, Commentors individually and collectively reserve all rights to dispute that volume is the sole appropriate basis for apportioning liability at the Lowry Site, and assert that the settlement should not be construed as determinative of any future apportionment of liability at Lowry which we understand is also the position of EPA. EPA Region VIII has made it clear in a letter to Chief Judge Finesilver dated November 20, 1992 that the EPA waste-in list was developed exclusively for the purpose of facilitating de minimis settlements and that EPA was not determining respective liability of the parties when it developed the waste-in list."

RESPONSE

EPA concedes that the volumes listed in the waste-in list are estimates; one of the main purposes of the Protocols was to develop a method to estimate volume contributions in the absence of complete records. After all, disposal at Lowry began over 25 years ago.

EPA believes, however, that the waste-in list represents a reasonable estimate of the volumes contributed by individual parties and thus, provides a reasonable basis to conclude de minimis settlements. The Administrative Order on Consent contains a reopener for new information which should protect non-settlors if EPA has underestimated any party's contribution.

As to the commentors and other non-settlors, if EPA were litigating this case, EPA would assert that they are jointly and severally liable for cleanup at Lowry.

December 18, 1992

Ms. Nancy H. Mueller (8HWM-SR)
Enforcement Specialist
U.S. Environmental Protection Agency, Region VIII
999 18th Street, Suite 500
Denver, CO 80202-2405

RE: In the Matter of Lowry Landfill
De Minimis Settlement

Dear Ms. Mueller:

On behalf of the City and County of Denver (Denver), Waste Management of Colorado, Inc. (WMC), and Chemical Waste Management, Inc. (CWM) we submit these comments in response to the Federal Register notice of the Proposed de minimis settlement by the U. S. Environmental Protection Agency (EPA), dated November 18, 1992. Denver, WMC, and CWM support EPA's settlements based on volume of waste disposed by each settlor and EPA's use of its list "PRPs at Lowry Landfill" also known as the "Waste-In-List" to establish the amount of each settling party's liability. The money obtained by EPA from the announced de minimis settlements should be applied to offset EPA's past costs at the Lowry Landfill Superfund site of $18.094,323.07 as of April 30, 1991.

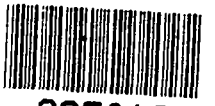
FOR THE CITY AND COUNTY OF DENVER

Carolyn L. Buchholz
Patton, Boggs & Blow

FOR WASTE MANAGEMENT OF COLORADO, INC. AND CHEMICAL WASTE MANAGEMENT, INC.

P. B. "Lynn" Walker
Regional Environmental Counsel

cc: Gary Maerz
Steve Coon
Steve Richtel



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December 18, 1992

(Via Hand Delivery)

Ms. Nancy H. Mueller, 8HWM-(SR)
De Minimis Coordinator/Enforcement Specialist
U.S. Environmental Protection Agency, Region VIII
999-18th Street, Suite 500
Denver, Colorado 80207-2405

Re: In re the Lowry Landfill De Minimis Settlement

Dear Ms. Mueller:

We enclose the comments of ASARCO Incorporated, Marathon Oil Company, and Martin Marietta Corporation relating to the proposed Administrative Order on Consent ("AOC") embodying a de minimis settlement for the Lowry Landfill. The United States Environmental Protection Agency ("EPA") gave notice of the proposed AOC on November 18, 1992. 57 Fed. Reg. 54,404 (Nov. 18, 1992). The enclosed comments support EPA's proposed settlement and request that EPA finalize the AOC and allow eligible de minimis parties to receive the statutory protections afforded thereunder. A summary of the comments follows:

- The proposed de minimis settlement complies with CERCLA Section 122(g) because the settlement is practicable and in the public interest. As a result of EPA's lengthy and thorough investigation of the Lowry Landfill, extensive information has been compiled and analyzed to allow EPA to develop a credible remedial cost estimate on which to base this settlement. This ensures the de minimis parties will pay their fair share of costs in the de minimis settlement, and are not being allowed to prematurely settle this matter at the expense of EPA and other PRPs.

- The proposed settlement share of de minimis parties must represent a minor portion of the response costs for the site, a key prerequisite for a de minimis settlement. Under the proposed AOC, the $633,789 to be contributed by the settling parties represents only .12% of the total estimated response costs for the Lowry Landfill. Therefore, the proposed settlement share of the de minimis parties represents a truly minor portion of total response costs.

- The settling parties meet all eligibility requirements to be considered de minimis parties, including low volumetric contributions and waste streams that are not significantly more toxic or of greater hazardous effect than wastes sent to the Site by other PRPs. First, the volumes attributed to each settling party are based on extensive documentation and reasonable and supportable volumetric assumptions. Each de minimis party's 104(e) Response was subject to extensive scrutiny by EPA and in many cases were subject to challenges by other PRPs, thus forcing a careful review of the information presented. Further, both EPA and the Lowry Landfill De Minimis Group ("LLDMG") have put forth credible arguments supporting their position that the de minimis settlors did not contribute disproportionately to the hazardous or toxic effects at the Site.

- The terms of the settlement are fair in that the settling parties are being required to pay their fair share of costs in connection with the Lowry Landfill in return for statutory protection from future cost-recovery claims. The premiums imposed on the settling defendants are consistent with CERCLA and EPA policy on de minimis settlements. The protections afforded the settlors under the proposed AOC are also justified based on those premiums and further reflect the degree of protection Congress intended to afford de minimis settlors under CERCLA. Thus, the settlement reflects CERCLA's overall objective to provide de minimis settlors with protection from any and all claims related to the Site in exchange for the de minimis settlors paying their fair share of costs.

Please contact the undersigned if you have any questions or comments regarding the above.

Sincerely,

Denise S. Maes
HOLLAND & HART
on behalf of Marathon Oil Company
and ASARCO Incorporated

James J. DeNapoli, by rsg
James J. DeNapoli
Associate General Counsel
on behalf of Martin Marietta Corporation

DSM/rsg
Enclosure

COMMENTS OF

ASARCO INCORPORATED, MARATHON OIL COMPANY
AND
MARTIN MARIETTA CORPORATION

CONCERNING

EPA'S PROPOSED ADMINISTRATIVE ORDER ON CONSENT
AT THE LOWRY LANDFILL SUPERFUND SITE

DOCKET NO. CERCLA-VIII-93-04

ASARCO Incorporated ("Asarco"), Marathon Oil Company ("Marathon Oil") and Martin Marietta Corporation ("Martin Marietta") hereby submit comments to the United States Environmental Protection Agency's ("EPA") notice of a proposed de minimis settlement related to the Lowry Landfill Superfund Site. Asarco, Marathon Oil, and Martin Marietta have participated, in good faith, for several years in negotiations with EPA regarding the Lowry Landfill in hopes that participation and cooperation would yield a de minimis settlement satisfactory to the interests of all parties. The companies were active members of either or both the Lowry Landfill Industry Generators Group ("LLIGG") and the Lowry Landfill De Minimis Group ("LLDMG"). Asarco, Marathon Oil and Martin Marietta support the proposed settlement.

I. INTRODUCTION.

On November 18, 1992, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. § 9601 et seq. (as amended), the EPA published its notice of a proposed Administrative Order on Consent ("AOC") regarding the Lowry Landfill Superfund Site ("Lowry Landfill" or "the Site"). 57 Fed. Reg. 54404 (Nov. 18, 1992). The proposed AOC would resolve the liability of 22 de minimis parties related to the Site. The proposed settlement requires the 22 parties to together pay $633,789.78. These revenues can be immediately used for Site cleanup. The parties represented by this AOC constitute approximately 100,000 gallons. Thus, as CERCLA and EPA guidance

directs, the proposed AOC encompasses truly de minimis parties who should be eliminated from the Lowry Landfill Superfund process.

II. EPA'S DE MINIMIS ELIGIBILITY CRITERIA ADEQUATELY ENSURES A PROPER SETTLEMENT.

CERCLA Section 122(g) provides that, in order for EPA to enter into a de minimis settlement, it must determine that: (1) the settlement is "practicable and in the public interest"; (2) the settlement involves only a "minor portion of the response costs" at the site; and (3) each settling party qualifies as a de minimis party in that its waste is minimal in quantity and toxic or hazardous effect when compared to other hazardous substances at the facility. 42 U.S.C. § 9622(g)(1)(A). EPA's proposed AOC regarding the Lowry Landfill satisfies this criteria.

A. The Proposed Settlement is Practicable and in the Public Interest.

EPA began initial site investigations in 1981 when the Site was first considered for inclusion on the National Priorities List ("NPL"). In 1983, EPA sent its first information requests pursuant to CERCLA section 104(e), 42 U.S.C. § 9604(e). EPA included the Site on the NPL in 1984. In 1985, EPA began site remedial investigations and identified potentially responsible parties ("PRPs"). In 1986, EPA issued a second set of section 104(e) requests, which led to an extensive PRP list in May 1988. Additionally, in 1988, EPA concluded that additional Site investigations were needed and divided the Site into six operable

units, grouped together by media. Pursuant to three AOCs, site remedial investigations are currently ongoing.[1]

As a result of this decade-long process, EPA has accumulated extensive documentation regarding each individual PRP, including the de minimis PRPs, Site conditions, and remedial alternatives. Accordingly, a de minimis settlement at this juncture is practicable.

Many may contend that sufficient data is lacking regarding the nature and quantity of wastes disposed at the Lowry Landfill and the exact cleanup costs and, as a result, a de minimis settlement is premature. Such a conclusion is unfounded. As the above chronology suggests, EPA has compiled extensive information that has been subjected to intense EPA and PRP scrutiny. Although some data gaps may exist at a site like the Lowry Landfill, where waste disposal began 28 years ago, EPA cannot wait until it has resolved all facts, otherwise a de minimis settlement may never be reached, thus defeating the purpose of CERCLA section 122(g). Precise resolution of all factual underpinnings of a de minimis settlement is not a precondition for settlement. In re Achushnet River and New Bedford Harbor, 712 F. Supp. 1019, 1032 (D. Mass. 1989); see also 52 Fed. Reg. 24,333, 24,335 (June 30, 1987) ("Interim Guidance on Settlement with De Minimis Waste Contributors Under Section 122(g) of SARA") [hereinafter "the De Minimis Guidance"] (EPA may consider settlement "where complete information concerning PRP

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[1] In November 1992, EPA announced a proposed remedy for Operable Units ("OU") 1 and 6--the OUs addressing ground water and subsurface liquids and deep ground water.

contribution and the nature of the remedy is not yet available."). Additionally, courts have held that it is not necessary to await such time as the exact cost of cleanup can be specified. U.S. v. Cannons Engineering Corp., 720 F. Supp. 1027 (D.Mass. 1989), aff'd, 899 F.2d 79 (1st Cir. 1990).

The proposed AOC is also in the public interest. Under the terms of the proposed AOC, the Hazardous Waste Superfund will receive almost three-quarters of a million dollars, which EPA can put immediately toward Site cleanup. In addition, the proposed AOC eliminates 22 parties from the Lowry Landfill Superfund process, thus streamlining, albeit modestly, future cleanup work and negotiations.[2] Also, by eliminating these de minimis parties from the process, EPA minimizes its transaction costs, as well as those of the settling parties, which is a primary goal of de minimis settlements.

Accordingly, EPA's proposed AOC satisfies the first requirement of CERCLA Section 122(g), that is, the proposed AOC is practicable and in the public interest.

B. The Proposed Settlement Represents Only a Minor Portion of Total Cleanup Costs.

The proposed AOC estimates total Lowry Landfill cleanup costs at $536 million. Pursuant to the settlement terms, EPA will

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[2] As EPA is aware, in 1992, many de minimis parties entered into a settlement with Waste Management of Colorado, the Site's operator, regarding their Lowry liability. Thus, those parties are no longer involved in the Superfund process. Accordingly, the proposed AOC attempts to eliminate all remaining de minimis parties from the process and to resolve all their outstanding liability to EPA.

receive $633,789.78 or .12% of the total estimated response costs. Accordingly, the AOC represents a truly minor portion of the total response costs.

EPA's overall cost estimate is relatively certain. As set forth in EPA's Memorandum In Support, EPA estimates total response costs at $536 million, which includes $342 million in a one-time remedial action and $153 million in operation and maintenance costs. Although the LLDMG had maintained that total cleanup costs, including operation and maintenance, would not exceed $350 million, EPA's proposed cost is adequately documented and sets forth a conservative estimate of costs.[3] Again, a de minimis settlement is appropriate even if complete information about the remedy were unavailable. Accordingly, even assuming EPA's proposed remedial action costs are not yet 100 percent certain, its proposed de minimis settlement is nonetheless appropriate.

C. **The Respondents are Truly De Minimis.**

On September 18, 1991, EPA announced the eligibility criteria applicable to a de minimis settlement related to the Lowry Landfill. The eligibility criteria requires that:

(1) The parties volumetric contribution must be 300,000 gallons or less.

(2) The parties waste stream must not be significantly more toxic or of greater hazardous effect than all other waste streams at the Site.

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[3] EPA's proposed remedial alternative for OUs 1 and 6 is $61 million. EPA has not yet proposed remedial alternatives for OUs 2 and 3 and OUs 4 and 5.

(3) The parties Section 104(e) response must be adequate and complete.

(4) The party must not be involved in any litigation against EPA concerning the Lowry Landfill Superfund Site.[4]

1. Volumetric Criteria.

Initially, EPA's volumetric assumptions were adequately supported. EPA's documentation includes the PRPs' section 104(e) Responses, the State of Colorado Industrial Waste Survey Responses, Denver's accounting records and customer lists created in conjunction with Denver's ownership, hazardous waste manifest, facility generator reports and other waste transporter records. EPA, with assistance from the Jacobs Engineering Group, extensively reviewed and compiled the information. EPA provided parties with several opportunities to inspect the documents and to challenge EPA's volumetric assumptions. After extensive review, revisions, and meetings with PRPs, EPA proposed an AOC based on volumetric assumptions made final in its February 1992 Waste-In List.[5]

Based on EPA's extensive documentation, it has concluded that 236 PRPs contributed over 142 million gallons of hazardous waste to the Lowry Landfill. Thus, EPA's volumetric criterion for de minimis eligibility of 300,000 gallons, or 0.21% of the total,

[4] Neither Asarco, Marathon Oil, nor Martin Marietta are involved in any litigation against EPA and, therefore, have no comments regarding the applicability of this criterion.

[5] Although the February 1992 Waste-In List describes Marathon Oil Company's 100 gallons of waste as consisting of lab chemicals and waste oil, this 100 gallons of waste is accurately described in EPA's internal file review forms as lab chemicals and in Marathon's initial reponse to EPA's request for information pursuant to Section 104(e) of CERCLA as laboratory chemicals.

truly represents a de minimis contribution in comparison to the Site's overall volume. In fact, EPA's cutoff of 0.21% is well below the cutoff set in other EPA de minimis settlements. See, e.g., Wheeling Disposal (1989) (.32% cutoff); Re-Solve, Inc. (1989) (1% cutoff); I. Jones Recycling (1989) (.45% cutoff).

2. Toxicity.

As set forth in CERCLA Section 122(g) and EPA's De Minimis Guidance, de minimis settlements may be entered into only if the de minimis settlors have contributed hazardous substances that are not "significantly more toxic" and not of "significantly greater hazardous effect" than other hazardous substances at the facility. De Minimis Guidance, 52 Fed. Reg. at 24336. In concluding that the Respondents were eligible de minimis parties under this criteria, EPA evaluated the toxic effect of all waste materials allegedly disposed at the Site by reviewing the oral and inhalation toxicity scoring tables used in CERCLA's Hazardous Ranking System ("HRS").[6] The HRS toxicity tables evaluate relative toxicity of hazardous substances on a score of zero to 10,000, with 10,000 representing the highest toxicity score. EPA designated those wastes with a score of 10,000 on either the oral or inhalation toxicity scoring table as "more toxic" than other waste materials.

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[6] Table 8-B of the Administrative Record assigns two separate waste streams to Marathon Oil Company. A "laboratory chemical" waste stream is listed as being comprised of petroleum sulfonate and waste oil, while a "waste oil" waste stream is listed as being comprised of petroleum sulfonate and waste oil. As set forth in footnote 5, Marathon's only waste stream, as determined by the EPA, consists of is laboratory chemicals. The characterization of Marathon's waste as including constituents in addition to laboratory chemicals is incorrect.

Reliance on the HRS as a basis for determining toxicity is appropriate. The HRS covers a broad range of hazardous substances and evaluates threats and exposure pathways of the particular hazardous substances present at the Lowry Landfill.[7]

EPA's HRS scoring reveals that 68% of all PRPs sent waste to the Site that scored 10,000 on one of the HRS toxicity scoring tables. Therefore, there is no support for singling out individual PRPs, concluding that their waste has a disproportionally larger impact on the hazardous or toxic conditions at the Site. If, for example, all PRPs at a site disposed of wastes of similar toxic effect, then all the PRPs (excluding those of higher volumes) would qualify for de minimis status. De Minimis Guidance, 52 Fed. Reg. at 24336. Here, although some de minimis settlors' waste materials are at the higher end of the HRS score (i.e., a toxicity value of 10,000), the score is not higher, i.e., more toxic, than the scores attributed to the majority of other waste materials present at the

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[7] During negotiations with EPA, the LLDMG advocated evaluating toxicity based on EPA's Reportable Quantity ("RQ") system. Because CERCLA has existing requirements related to reportable quantities, see 42 U.S.C. § 9602(a), the RQ approach also provides a straightforward and useful way to evaluate toxicity. The RQ system correlates overall toxicity and hazardous effects according to a tiered scale of quantities (1, 10, 100, 1000 and 5000 pounds). The CERCLA-assigned RQ levels include all pertinent criteria that are important in assessing toxicity and hazardous effects of listed substances because, as EPA has acknowledged, the levels are based on "specific scientific and technical criteria that relate to the possibility of harm from the release of hazardous substances at certain levels." 54 Fed. Reg. 33418, 33420 (Aug. 14, 1989). Although EPA apparently rejected the LLDMG's suggested approach, EPA's HRS scoring approach is not mutually exclusive of the LLDMG's approach. In other words, whether it be the HRS or the RQ scoring, the settling non-federal de minimis parties satisfy the toxicity criterion.

Site. Accordingly, the de minimis settlors meet CERCLA's stated criteria regarding toxicity and hazardous effect. Their waste materials are not contributing disproportionally to the hazardous or toxic conditions at the Site.[8]

3. **Sufficiency of Section 104(e) Responses.**

The LLDMG, with the assistance of an independent technical consultant, extensively reviewed each individual PRP's Section 104(e) Responses. The results of that extensive analysis was provided to EPA as the LLDMG's level of effort review. The purpose of the review was to provide EPA and the public with a level of comfort that the information sources relied upon for purposes of settlement were credible and accurate. This criterion supports the overall objectives of CERCLA by insuring that the de minimis settlement encompasses only those PRPs that are truly de minimis. Each of the named Respondents meet this criterion.

III. TERMS OF SETTLEMENT.

A. EPA's Findings.

In entering into EPA's proposed de minimis settlement, no party admits to liability. As EPA acknowledges in its Memorandum

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[8] Some may claim that PRPs with waste constituents with a score of 10,000 on one of the HRS toxicity scoring tables should automatically be excluded from the de minimis process. Such a view is at odds with CERCLA's purpose for evaluating toxicity in the first place. EPA evaluates toxicity for purposes of determining the appropriate remedial action. If a PRP disposed hazardous substances, and those hazardous substances are directing the remedy or creating costs not proportionate to their volume, then the PRP responsible for those waste materials should not be considered de minimis. De minimis Guidance, 52 Fed. Reg. at 24336. Accordingly, it is not enough simply to conclude that a particular score on the HRS scoring should eliminate a PRP from the de minimis process.

in Support, EPA's conclusions on volumetric contributions and de minimis eligibility are merely to facilitate settlement and do not constitute findings of fact or determinations of liability.

B. **Premium Payments**.

A de minimis settlors' payment must be at least equal to their volumetric share of the total past and projected response costs at the Site. De Minimis Guidance, 52 Fed. Reg. at 24338. In addition, EPA may require that a premium be paid, which would provide EPA with a wide margin of safety should actual remedial costs exceed estimated costs. De Minimis Guidance, 52 Fed. Reg. at 24337; Memorandum from Thomas L. Adams, Jr., Assistant Admin. for Enforcement to Regional Administrators, Guidance on Premium Payments in CERCLA Settlements, Nov. 17, 1988, at 2. Any premium paid is typically in exchange for EPA's grant of a covenant not to sue without the usual reopeners for cost overruns and future response actions. Accordingly, the premium paid reflects the degree or scope of protection afforded in the settlement.

Here, the proposed AOC sets forth two premium options: 50% and 200%. In exchange for the 50% premium, EPA extends a covenant not to sue for costs in connection with the Site that do not exceed $536 million, but does not provide protection if costs exceed that amount. If, however, a settling PRP pays the additional premium (3.0 multiplier), EPA extends a broader covenant not to sue in the event Site cleanup costs exceed $536 million. These premium options, and the coverage extended by each, is consistent with CERCLA and EPA guidance.

First, EPA has adequately considered the fact that there are uncertainties in the yet to be completed remedial phase. EPA assumes a conservative remedial cost estimate ($536 million) and, therefore, de minimis parties are paying their share of an estimated remedial cost that may, in the end, exceed the actual remedial costs. On the other hand, if actual remedial costs exceed $536 million, then de minimis parties who choose the smaller 50% premium will not receive protection from such a cost overrun, while those who choose the 200% premium will have paid additional funds to cover for any cost overruns. In either event, the settling de minimis parties are, at a minimum, contributing their fair share of cleanup costs. Therefore, the payment terms of the proposed AOC are consistent with CERCLA objectives and EPA guidance.

C. **Scope of Protection**.

One key overall objective of de minimis settlements is to resolve de minimis parties' liability in a final manner. The finality of settlement is a key attraction of de minimis settlements. Thus, in entering into this settlement, de minimis settlors seek protection from any and all claims related to the Site. Consistent with CERCLA's statutory purpose and EPA policy on de minimis settlements, the proposed AOC affords settlors this protection, that is, protection from any and all claims related to the Site, subject only to the explicit reopener provisions and EPA's reservation of rights. The definition of remediation costs, as set forth in the AOC, is broadly defined in order to afford expansive protection. It is, therefore, the intent of all parties

to the agreement to allow de minimis settlors to pay in excess of their volumetric share in exchange for protection from any and all claims related to the Site.

The AOC provides only one reopener, which relates to remedial costs exceeding $536 million, and other limited claims expressly reserved by EPA, such as natural resources damages and other reopener provisions. Thus, with very little, or no, exception, this agreement protects de minimis settling parties from all cost recovery claims in connection with the Site, and is, therefore, consistent with EPA policy providing de minimis settlors with an expedited settlement that eliminates them from all Site activities.

IV. CONCLUSION.

On the basis of the foregoing, the proposed AOC embodying the Lowry Landfill de minimis settlement is consistent with CERCLA and relevant EPA policy regarding de minimis settlements. The de minimis settlors have fulfilled the specific eligibility criteria EPA has established. The eligibility criteria is consistent with CERCLA and EPA policy ensuring that only those parties who are truly de minimis parties will be afforded the appropriate protections. The proposed AOC will extend statutory protection to the de minimis settlors, ensuring that they will be eliminated from the Lowry Landfill Superfund process subject to these parties paying their fair share of costs in connection with the Site. Therefore, EPA should finalize and enter into the proposed AOC with the qualifying de minimis parties identified in EPA's November 18, 1992 notice and wishing to resolve their Lowry Landfill liability.

AMAX

Recd

December 18, 1992

ADMINISTRATIVE RECORD

Nancy H. Mueller (8HWM-SR)
Enforcement Specialist
U.S. Environmental Protection Agency
Region VIII
999 18th Street, Suite 500
Denver, CO 80202-2405

FILE PLAN
30.01

Re: Lowry Landfill De Minimis Settlement

Dear Ms. Mueller:

I am writing this letter on behalf of Amax Research & Development, Inc. ("Amax R&D"). Amax R&D is this day, together with Conoco, Inc. and The S.W. Shattuck Chemical Company, Inc., submitting comments on the U.S. Environmental Protection Agency's ("EPA's") De Minimis Settlement for the Lowry Landfill Site, Docket No. CERCLA-VIII-93-04 ("De Minimis Settlement"). Separate from these joint comments, Amax R&D would like to make the following additional comments.

While, except for the need to clarify the scope of the settlement as to federal PRPs, Amax R&D is not contesting the De Minimis Settlement as to the specific parties included in the settlement, we do wish to make clear that we disagree with the methodology and eligibility criteria used by EPA to select de minimis parties for this settlement.

Statement in Support Does not Address Prior Amax R&D Comments

First, we wish to express our concern that the De Minimis Administrative Record cited in EPA's "Statement in Support of the Lowry Landfill De Minimis Settlement, Administrative Order on Consent, Docket No.: CERCLA-VIII-93-04" does not include Amax R&D's extensive comments to EPA on the proposed de minimis settlement submitted more than a year ago. By letter dated December 2, 1991, Amax R&D submitted to EPA extensive and detailed analysis of information that had only just then been made available to the public.

What this analysis showed was that organic solvents or their degradation products comprised the vast majority of the relative risks posed by all chemicals at the site, but were only a small percentage of the total volume of wastes disposed at the site. More importantly, it appeared that the group of PRPs EPA had indicated were eligible for a de minimis settlement were a major contributor of solvents at the site, despite their small total volumes. We have yet to receive a detailed response to our comments.

AMAX Inc. Western Area Law Department
1626 Cole Boulevard, Golden, Colorado 80401-3293 USA
Telephone (303)-234-9020; Facsimile (303)-231-0222

Despite our grave concern that major solvent contributors to the site should not be afforded a de minimis settlement, it appears that none of the specific de minimis PRPs included in the De Minimis Settlement were major solvent contributors. Although Martin Marietta was identified in our December 1991 comments as a PRP of potential concern, they had the smallest amount of solvents of all PRPs so identified and are not considered by Amax R&D as a major solvent contributor. Therefore, we have determined there is no need to formally challenge this settlement.

EPA's Toxicity Approach

Second, while not formally challenging the De Minimis Settlement, Amax R&D wishes to make clear it does not agree with EPA's Toxicity Approach used to determine eligibility for participation in the De Minimis Settlement. In particular, Amax R&D believes using the toxicity screening scores from the Hazard Ranking System ("HRS") does not reflect the statutory requirement that the "toxic or other hazardous effects" from the settling party's wastes are minimal in comparison to wastes from other PRPs at the site. CERCLA, §122(g)(1)(A)(ii). Use of the HRS scoring criteria omits any consideration of (1) the total quantity of the hazardous substance (versus the total amount of wastes containing the hazardous substance), (2) the concentration of the hazardous substance, or (3) the specific form of the hazardous substance. All of these factors are key to determining relative toxic "effects" at this particular site.

For example, EPA's scoring of Amax R&D's wastes gives a high score to its wastes based on a high "inhalation" score for chromium and nickel. These metals in Amax R&D's wastes cannot volatilize and pose any "inhalation" risk. Moreover, the specific forms of these metals that are the basis of the high HRS inhalation scores (e.g., nickel carbonyl) are not even present in Amax R&D's wastes. While such scoring is easy to do it bears no relation to good science.

Thus, while Amax R&D does not intend to challenge the De Minimis Settlement (although we are urging separately in the above referenced joint comments to clarify the scope of the settlement in relation to the federal PRPs), we reserve the right to challenge future de minimis settlements which may be based on the same criteria.

Sincerely,

Louis J. Marucheau

Louis J. Marucheau
Assistant General Counsel-Environment

RECD
December 18, 1992

Nancy H. Mueller (8HWM-SR)
Enforcement Specialist
U.S. Environmental Protection Agency
Region VIII
999 18th Street, Suite 500
Denver, CO 80202-2405

Re: Lowry Landfill De Minimis Settlement

Dear Ms. Mueller:

Amax Research & Development, Inc., Conoco, Inc., and The S.W. Shattuck Chemical Company, Inc., corporations authorized to do business in the State of Colorado and members of the Lowry Coalition, (hereinafter referred to collectively as "Commentors") herewith file their comments to the U.S. Environmental Protection Agency's ("EPA's") De Minimis Settlement for the Lowry Landfill Site, Docket No. CERCLA-VIII-93-04 ("De Minimis Settlement"). Our comments concern two main issues which are set forth below.

FEDERAL PRPS

First, while the text of the Administrative Order on Consent (AOC) and the explanation contained in the "Statement in Support" indicate that this settlement only covers the liabilities of the settling parties as generators or "arrangers" under §107(a)(3) and not as owners or operators under §107(a)(1) or (a)(2), the lack of a definition for "matters" covered or addressed by the AOC requires that this issue be clarified.

This is an important issue because some of the federal PRPs covered by this proposed de minimis settlement may well be considered, by their activities or control of the Site, as "owners" and/or "operators" of the Site and, therefore, have a more than de minimis share of responsibility for clean-up of the Site. While we do not believe EPA would deliberately allow federal PRPs to escape potentially significant liability after making only de minimis payments, the intention that such liabilities not be covered should be made express.

Moreover, in the present situation, where the U.S. Government is settling with itself, the EPA must avoid any instance of inappropriate self-dealing and ensure that the settlement is in the public interest. Indeed, under federal ethics regulations, federal employees are barred from conduct which might result in or create

the appearance of adversely affecting the confidence of the public in the integrity of the Government. See, 5 CFR §735.201a(f).

Because EPA has expressly excluded certain liabilities (e.g., liability for natural resource damage claims), the continued omission of any express exclusion of owner/operator liability would continue to cast doubt on what exactly is covered by the settlement. Therefore, this Consent Order must contain a clear and express exclusion of such owner/operator liability from this settlement agreement.

To accomplish this clarification, commentors suggest just a few changes. First, amend Paragraph 16.b to read as follows:

> "b. any matter not expressly included in this Consent Order, including, without limitation, any liability for damages to natural resources and any liability as owner or operator under §107(a)(1) or (2);"

Then, add the following new definition in Section II and capitalize same in Paragraph 23:

> "'Matters Addressed in this Consent Order' shall mean Respondents' liability under section 107(a)(3) of CERCLA, 42 U.S.C. §9607(a)(3), for arranging for disposal or treatment of hazardous substances at the Site."

While these small changes will require the Respondents to execute an amended AOC, such changes are necessary and, in any event, are primarily due to the fact that EPA's AOC, in contrast to most AOCs prepared by EPA, contained no definition of "matters" covered by the AOC. Having had Commentors' AOC with EPA amended in response to public comment, Commentors don't believe this process will be burdensome.

EPA'S WASTE-IN LIST

Second, it is noted that EPA has negotiated its De Minimis Settlement based on volume, and permitted the settling parties to resolve liability based on their volumetric percentage of total estimated wastes at the Lowry Site. EPA has prepared a waste-in volume list for parties liable pursuant to §107(a)(3) and (a)(4) of CERCLA as "transporters" or "arrangers". This waste-in volume list was prepared by EPA's contractor, Jacobs Engineering Group, Inc., as noted in the Statement in Support of the Lowry Landfill De Minimis Settlement Administrative Order on Consent ("Statement in Support"). The waste-in list used for the De Minimis Settlement, after having been revised several times, estimated a total volume of 142,295,420 gallons of liquid waste at Lowry. The respective volumes of the Settling Respondents on which the De Minimis Settlement was based are taken from this EPA waste-in list.

Commentors note that, while it may be appropriate for EPA to conclude settlements with certain parties based on these volume estimates, the mere fact that such settlements are negotiated and approved does not render EPA's estimates accurate or credible. Commentors assert that total waste volumes at the Site may well be different than the total volume reflected in EPA's waste-in volume estimate. Accordingly, Commentors assert that they reserve all rights to contest or dispute the EPA waste-in volume estimates attributed to them by the EPA list despite the use of the waste-in list as the basis for de minimis settlement.

In addition, Commentors individually and collectively reserve all rights to dispute that volume is the sole appropriate basis for apportioning liability at the Lowry Site, and assert that the settlement should not be construed as determinative of any future apportionment of liability at Lowry which we understand is also the position of EPA. EPA Region VIII has made it clear in a letter to Chief Judge Finesilver dated November 20, 1992 that the EPA waste-in list was developed exclusively for the purpose of facilitating de minimis settlements and that EPA was not determining respective liability of the parties when it developed the waste-in list.

AMAX RESEARCH & DEVELOPMENT, INC.

CONOCO, INC.

THE S.W. SHATTUCK CHEMICAL COMPANY, INC.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

IN THE MATTER OF:	ADMINISTRATIVE ORDER ON CONSENT
LOWRY LANDFILL SITE Arapahoe County, Colorado	DE MINIMIS SETTLEMENT
Proceeding under Section 122 (g)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9622(g)(4)	DOCKET NO. : CERCLA-VIII-~~92~~ 93-04

EXHIBIT 1

I. JURISDICTION

This Administrative Order on Consent ("Consent Order") is issued pursuant to the authority vested in the President of the United States by Section 122(g)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 ("CERCLA"), Pub. L. No. 99-499, 42 U.S.C. 9622 (g)(4), to reach settlements in actions under Section 106 or 107(a) of CERCLA, 42 U.S.C. 9606 or 9607(a). The authority vested in the President has been delegated to the Administrator of the United States Environmental Protection Agency ("EPA") by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to the Regional Administrators of the EPA by EPA Delegation No. 14-14-E (Sept. 13, 1987).

This Administrative Order on Consent is issued to Respondents. Each Respondent agrees to undertake all actions required by the terms and conditions of this Consent Order. Each Respondent further consents to and will not contest EPA's jurisdiction to issue this Consent Order or to implement or enforce its terms.

II. DEFINITIONS

Unless otherwise expressly provided herein, terms used in this Consent Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning(s) assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Consent Order or in the Appendices attached hereto and incorporated hereunder, the following definitions shall apply:

"Base Amount" shall mean the product of the Respondent's volumetric contribution of Waste Material to the Site (as identified in Appendix A or B hereto) and $3.77, the per gallon dollar amount. The per gallon dollar amount was computed by dividing the Remediation Cost by the Total Volume of Waste Material at the Site.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601-9675.

"Consent Order" or "Order" shall mean this Order and all appendices and attachments hereto. In the event of conflict between this Order and any appendix or attachment, this Order shall control.

"Day" shall mean a calendar day unless expressly stated otherwise. "Working day" shall mean a day other than a Saturday, Sunday or Federal holiday. In computing any period of time under this Consent Order where the last day would fall on a Saturday,

Sunday or Federal holiday, the period shall run until the close of business of the next working day.

"EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"Federal Respondents" shall mean the United States Air Force; the Defense Logistics Agency; the EPA Region VIII Laboratory; the United States Mint (Treasury Department); the Veterans Administration; and the United States Geological Survey; and their successor departments or agencies.

"Future Response Costs" shall mean all response costs, including, but not limited to, direct and indirect costs, that the United States and any other person incur in connection with the Site after April 30, 1991.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. part 300, including but not limited to, any amendments thereto.

"Non-Federal Respondents" shall mean all Respondents except for Federal Respondents.

"Operation and Maintenance" or "O & M" shall mean all activities required to maintain the effectiveness of the remedial action.

"Paragraph" shall mean a portion of this Consent Order identified by an arabic numeral.

"Past Response Costs" shall mean all response costs, including, but not limited to, direct and indirect costs and interest that the United States incurred with regard to the Site prior to April 30, 1991.

"RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901-6991i, also known as the Resource Conservation and Recovery Act.

"Remediation Cost" shall mean the estimated total dollar amount for all response actions at the Site, including, but not limited to, the cost of remedial action, Past Response Costs, Future Response Costs, and Operation and Maintenance Costs. The Remediation Cost is $536,000,000.

"Respondents" shall mean those entities, including the Federal Respondents, identified in Appendices A and B.

"Section" shall mean a portion of this Consent Order identified by a roman numeral.

"Settlement Amount" is the total amount each Respondent is obligated to pay as identified in Appendices A and B to this Consent Order.

"Site" shall mean the Lowry Landfill Superfund Site as defined in Section III, Paragraph 1 of this Order.

"Total Volume of Waste Material" shall mean the estimated cumulative amount of Waste Material disposed at the Site. The Total Volume of Waste Material is 142,295,420 gallons.

"United States" shall mean the United States of America, including its agencies, departments, and instrumentalities, with the exception of the Department of Energy.

"Waste Material" shall mean waste containing (1) any hazardous substance as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) or (2) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33).

III. STATEMENT OF FACTS

The following paragraphs summarize the factual determinations made by EPA in support of this Order. Respondents neither admit nor deny them.

1. The Lowry Landfill Superfund Site is the area ranked Number 180 on the National Priorities List promulgated on September 1, 1984 (49 FR 37070), as that area has been defined and may be expanded by the United States from time to time. The Site, which includes the areal extent of contamination, is located near the intersection of Quincy Avenue and Gun Club Road, approximately 15 miles southeast of downtown Denver, Colorado. The Lowry Landfill is owned by the City and County of Denver ("Denver") and encompasses approximately 400 acres, generally known as Section 6. Section 6 is located in unincorporated Arapahoe County, Colorado.

2. In 1964, the United States quit-claimed the property upon which the Lowry Landfill is located to Denver conditioned upon its use of the property as a municipal sanitary landfill for a period of 20 years. From 1967 through 1980, Denver operated the Lowry Landfill as an industrial and municipal waste landfill. During this period, liquid industrial wastes were deposited in approximately 65 unlined pits at the Lowry Landfill. Subsequently, the liquid wastes were covered with

municipal refuse or soil. Hazardous substances disposed at Lowry Landfill have been detected in the groundwater, surface water, soils, sediments, and air on portions of the Site.

3. As a result of the release or threatened release of hazardous substances into the environment, EPA has undertaken response actions at the Site under Section 104 of CERCLA, 42 U.S.C. § 9604, and will undertake response actions in the future. EPA has entered into Administrative Orders on Consent (AOCs) for the performance of Remedial Investigations/ Feasibility Studies (RIs/FSs) for Shallow Groundwater and Subsurface Liquids and Deep Groundwater Operable Units (OUs) 1 & 6 (December 22, 1989), Landfill Solids and Gas OUs 2 & 3 (July 27, 1990), and Surface Water, Soils and Sediment OUs 4 & 5 (March 25, 1991). EPA and potentially responsible parties have also undertaken interim response actions including the Barrier Wall and Treatment Plant, the Drum Removal Action, and the Surface Water Removal Action. A Site-wide Record of Decision ("ROD") is not expected until the Spring of 1994.

4. In performing these response actions, EPA has incurred and will continue to incur response costs at or in connection with the Site. As of April 30, 1991, EPA had incurred $18,094,323.07.

5. Information currently known to EPA indicates that:

a. Each Respondent listed on Appendix A or B to this Consent Order arranged for disposal or treatment, or arranged with a transporter for disposal or treatment, of Waste Material owned or possessed by such Respondent at the Site, or accepted Waste Material for transport to the Site.

b. The amount of Waste Material contributed to the Site by each Respondent individually is equal to or less than 300,000 gallons and the toxic or other hazardous effects of the Waste Material contributed to the Site by each Respondent do not contribute disproportionately to the cumulative toxic or other hazardous effects of the Waste Material at the Site.

c. EPA and the Respondents (collectively referred to as the "parties") agree that settlement of this case without litigation and without the admission or adjudication of any issue of fact or law is the most appropriate means of resolving this action.

6. In evaluating the settlement embodied in this Consent Order, EPA has considered the potential costs of remediating the contamination at or in connection with the Site taking into account possible cost overruns in completing the remedial action, and possible future costs if the remedial action is not protective of public health or the environment.

7. Payments required to be made by each Respondent pursuant to this Consent Order are a minor portion of the total response costs at the Site which EPA, based upon currently available information, estimates to be $536,000,000.

8. EPA has identified persons other than the Respondents who owned or operated the Site, or who arranged for disposal or treatment, or arranged with a transporter for disposal or treatment, of Waste Material owned or possessed by such a person at the Site, or who accepted Waste Material for transport to the Site. EPA has considered the nature of its case against these non-settling parties in evaluating the settlement embodied in this Consent Order.

IV. DETERMINATIONS

Based upon the Findings of Fact set forth above and on the administrative record for the Site, EPA has determined that:

1. The Lowry Landfill Site is a "facility" as that term is defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

2. Each Respondent is a "person" as that term is defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

3. Each Respondent is a potentially responsible party within the meaning of Section 107(a) and 122(g)(1) of CERCLA, 42 U.S.C. §§ 9607(a) and 9622(g)(1).

4. The past, present or future migration of hazardous substances from the Site constitutes an actual or threatened "release" as that term is defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

5. Prompt settlement with the Respondents is practicable and in the public interest within the meaning of Section 122(g)(1) of CERCLA, 42 U.S.C. § 9622(g)(1).

6. The amount of Waste Material contributed to the Site by each Respondent and the toxic or other hazardous effects of the Waste Material contributed to the Site by each Respondent are minimal in comparison to other Waste Material at the Site pursuant to Section 122(g)(1)(A) of CERCLA, 42 U.S.C. § 9622(g)(1)(A).

7. The Regional Administrator of the United States Environmental Protection Agency, Region VIII ("Regional Administrator"), has determined that prompt settlement of this case is practicable and in the public interest, and that the settlement embodied in this Consent Order is fair, reasonable and consistent with CERCLA.

V. ORDER

Based upon the administrative record for this Site and the Findings of Fact and Determinations set forth above, and in consideration of the promises and covenants set forth herein, it is hereby AGREED TO AND ORDERED:

PAYMENT

1. As indicated by each Respondent's premium election on the signature page of this Consent Order, each Respondent has elected one of the two premium options set forth below. If Premium Option A was selected by the Respondent, the Respondent shall refer to Appendix A for such Respondent's payment of the Settlement Amount (a total multiplier of 1.5 to Respondent's Base Amount) required by this Consent Order. If Premium Option B was selected by the Respondent, the Respondent shall refer to Appendix B for such Respondent's payment of the Settlement Amount (a total multiplier of 3.0 to Respondent's Base Amount) required by this Consent Order.

a. **OPTION A:** Each Respondent listed in Appendix A shall pay a "premium for settlement" to the United States in an amount equal to the product of 0.5 and that Respondent's Base Amount set forth in Appendix A.

b. **OPTION B:** Each Respondent listed in Appendix B shall pay a "premium in lieu of cost reopener" to the United States in an amount equal to the product of 2.0 and that Respondent's Base Amount set forth in Appendix B.

2. Each Non-Federal Respondent shall pay to the Hazardous Substance Superfund the Settlement Amount set forth in Appendix A or B to this Consent Order within 30 days of the effective date of this Consent Order.

3. All payments made by Non-Federal Respondents pursuant to Section V, Paragraph 2, including any interest thereon that may be due and payable pursuant to Section V, Paragraph 6, infra, shall be made by certified or cashier's check made payable to "EPA Hazardous Substance Superfund." Payments must be designated as "Response Costs--Lowry Landfill De Minimis Settlement, Docket No.: CERCLA- VIII-92-_____, Site No. 8, (Colorado)" and shall be sent to:

United States Environmental Protection Agency
Region VIII
P.O. Box 360859 M
Pittsburgh, PA 15251
Attn: Superfund Accounting

with a copy sent to:

EPA Cost Recovery Program Manager
Superfund Enforcement Section (8HWM-SR)
United States Environmental Protection Agency
999 18th Street, Suite 500
Denver, Colorado 80202-2405

4. Within a reasonable time after the effective date of this Order, but not exceeding six months, the Federal Respondents shall transfer, or have transferred on their behalf, the Settlement Amount set forth in Appendix A or B to this Consent Order to the "EPA Hazardous Substance Superfund," in accordance with the provisions of Paragraph 3, or as may otherwise be agreed between EPA and the Federal Respondents. Notwithstanding any other provision of this Order as to each Federal Respondent, in the event that a Federal Respondent fails to complete transfer of its respective share into the Hazardous Substance Superfund within six months of the effective date of this Order, EPA in its unreviewable discretion may determine the settlement is null and void as to that Federal Respondent.

5. No provision of this Order shall be interpreted as or to constitute a commitment or requirement that the Federal Respondent obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. §1341.

6. Interest on all payments required by Section V, Paragraphs 2 and 4 shall begin to accrue upon the effective date of this Consent Order, at the rate established pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). In the event that any payment required of any Non-Federal Respondent by Paragraph 2 of this Section is not made within 30 days of the effective date of this Consent Order or any transfer of funds into the Hazardous Substance Superfund by any Federal Respondent by Paragraph 4 of this Section is not made within six months of the effective date of this Consent Order, such Respondents shall pay accrued interest on the unpaid balance. Interest on any payment required of any Respondent shall be compounded annually. On October 1st of each subsequent fiscal year, any unpaid balance shall begin accruing interest at a new rate to be determined by the Secretary of the Treasury. Interest shall accrue at the rate specified through the date of the Respondent's payment. Accrued interest on the amount set forth in Paragraphs 2 and 4 of this Section shall be paid to the EPA Hazardous Substance Superfund. Payments of interest made under this Paragraph shall be in addition to any remedies or sanctions available to EPA by virtue of any Respondent's failure to make timely payments under this Section.

7. Settlement Amounts paid by each Respondent under this Consent Order are not fines, penalties or monetary sanctions.

CIVIL PENALTIES

8. In addition to any other remedies or sanctions available to the EPA, including remedies specified in this Consent Order, any Non-Federal Respondent that fails or refuses to comply with any term or condition of this Consent Order shall be subject to a civil penalty of up to $25,000 per day of such failure or refusal pursuant to section 122(l) of CERCLA, 42 U.S.C. § 9622(l).

CERTIFICATION OF RESPONDENTS

9. Each Respondent hereby certifies, to the best of its knowledge and belief, that it has provided to the EPA all information requested by the EPA pursuant to its authority under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), in its possession, or in the possession of its officers, directors, employees, contractors, or agents that relates in any way to the ownership, operation, generation, treatment, transportation, storage, or disposal of Waste Material at the Site.

10. As of the effective date of this Consent Order, each Respondent hereby certifies that to the best of its knowledge and belief, the Respondent neither possesses nor knows of other documents or information which shows:

a. that the Respondent has arranged for the disposal of and/or transported a higher volume of Waste Material to the Site than is shown on Appendix A or B; or

b. that the Respondent has arranged for the disposal of and/or transported Waste Material to the Site possessing a different chemical nature or constituent or possessing more toxic or other hazardous effects than has been disclosed in documents or information previously submitted to the EPA.

11. Each Respondent hereby certifies, individually, that it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information within the scope of the information requested by the EPA pursuant to Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), since it received any such request for information relating to the Site, and that it has fully complied to the best of its knowledge and belief with any and all such EPA requests for information pursuant to section 104(e) of CERCLA, 42 U.S.C. § 9604(e).

COVENANT NOT TO SUE

12. Subject to the reservations of rights in Section V, Paragraphs 16 through 21 of this Consent Order, and in

consideration of each Respondent's full payment of the Settlement Amount and interest thereon, plus any civil penalties as to Non-Federal Respondents, and upon the effective date of this Consent Order, the EPA covenants not to sue or to take any other civil or administrative action against each such Respondent, and covenants not to take any administrative actions against Federal Respondents, including, but not limited to, actions pursuant to sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), and section 7003 of RCRA, 42 U.S.C. § 6973, relating to the Site.

13. This covenant not to sue is conditioned as to each Respondent upon the complete and satisfactory performance of all obligations of such Respondent under this Consent Order.

14. Each Respondent agrees not to assert any claims or causes of action against the United States, including, but not limited to, the Federal Respondents or the Hazardous Substance Superfund through sections 106(b)(2), 111 or 112 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9611 or 9612, or to seek any other costs, damages, or attorneys' fees from the United States with respect to the Site or this Consent Order. However this release by Respondents shall be null and void as to any Federal Respondent for whom EPA elects to nullify this Order pursuant to Section V, Paragraph 4 of this Consent Order.

15. The covenant not to sue set forth in Section V, Paragraph 12, supra, extends only to Respondents and does not extend to any other person.

RESERVATION OF RIGHTS

16. Nothing in this Consent Order is intended to be or shall be construed as a release or covenant not to sue for any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or in equity, which the United States may have against any Respondent for:

a. Any liability as a result of failure to make the payments required by Section V, Paragraphs 2 and 4 of this Consent Order;

b. Any matter not expressly included in this Consent Order, including, without limitation, any liability for damages to natural resources;

c. Criminal liability; and

d. Liability arising from the past, present or future disposal, release or threat of release of Waste Material outside the Site as defined in Section III, Paragraph 1 of this Consent Order.

17. Nothing in this Consent Order constitutes a covenant not to sue or to take action or otherwise limits the ability of the United States to seek or obtain further relief from any of the Respondents, and the Covenant not to Sue in Section V, Paragraph 12 of this Consent Order shall be null and void, if:

e. information not currently known to the EPA is discovered which indicates that such Respondent contributed Waste Material to the Site in a greater amount than that listed in Appendix A or B of this Consent Order, or if the Respondent contributed Waste Material which contributed disproportionately to the cumulative toxic or other hazardous effects of the Waste Material at the Site. Information regarding the Site, not currently known, shall not include information which was in the possession of the EPA or its contractors or agents as of January 1, 1992.

f. response costs actually incurred during the completion of the remedial action at the Site exceed $536,000,000, the Remediation Cost for the Site. This subparagraph shall not apply to Respondents that opt to pay a "premium in lieu of cost reopener" pursuant to Section V, Paragraph 1(b).

18. Except as provided in Section V, Paragraph 12, nothing in this Consent Order is intended as a release or covenant not to sue for any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or equity, which the United States may have against any person, firm, corporation or other entity not a signatory to this Consent Order.

19. No person other than a party executing this Consent Order may enforce any of its terms. Nothing in this Consent Order is intended to waive, release, or diminish Respondents' ability to enforce without penalty in court the terms of this Consent Order.

20. The parties agree that the effect of this Consent Order shall be as stated in section 122(d)(1)(B) of CERCLA, 42 U.S.C. § 9622(d)(1)(B).

21. EPA and the Respondents agree that payment by the Respondents in accordance with this Consent Order does not constitute an admission of any liability by any Respondent.

EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION

22. Nothing in this Consent Order shall be construed to create any rights in, or grant any cause of action to, any

person not a party to this Consent Order. Each of the parties hereto expressly reserves any and all rights (including, but not limited to, any right of contribution), defenses, claims, demands, and causes of action which each party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a party hereto.

23. With regard to claims for contribution against Respondents for matters addressed in this Consent Order, the Parties hereto agree that the Respondents are entitled to such protection from contribution actions or claims as is provided by sections 113(f)(2), 113(g)(3) and 122(g)(5) of CERCLA, 42 U.S.C. §§ 113(f)(2), 9613(g)(3) and 9622(g)(5).

24. Each Respondent agrees not to contest or otherwise challenge in any way EPA's selection and implementation of the Record(s) of Decision (ROD(s)) or other response action(s) at the Site.

PARTIES BOUND

25. This Consent Order shall apply to and be binding upon the EPA, each of the Respondents, and their officers, directors, employees, agents, successors and assigns. Any change in ownership or corporate or governmental status of a Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter such Respondent's responsibilities under this Consent Order. Each signatory, or group of signatories where applicable, to this Consent Order represents that he or she is fully authorized to enter into the terms and conditions of this Consent Order and to bind legally the Respondent represented by him or her.

PUBLIC COMMENT

26. This Consent Order shall be subject to a thirty-day public comment period, pursuant to section 122(i) of CERCLA, 42 U.S.C. § 9622(i). In accordance with section 122(i)(3) of CERCLA, 42 U.S.C. § 9622(i)(3), EPA may withdraw its consent to this Consent Order if during public comment, comments received disclose facts or considerations which indicate this Consent Order is inappropriate, improper, or inadequate.

EFFECTIVE DATE

27. The effective date of this Consent Order shall be the date upon which EPA issues written notice to the Respondents that the public comment period pursuant to Section V, Paragraph 24, of this Consent Order has closed and that comments received, if any, do not require modification of or EPA withdrawal from this Consent Order.

COUNTERPARTS

28. This Consent Order may be executed in any number of counterparts, each of which when executed and delivered to EPA shall be deemed to be an original, but such counterparts shall together constitute one and the same document.

IT IS SO AGREED AND ORDERED:

U.S. Environmental Protection Agency

By _____ 8/28/92
Robert L. Duprey, Director [Date]
Hazardous Waste Management Division

Respondents

By Donald J Sealy 7-13-92
[Name] [Date]

Title: Area Manufacturing Manager

Initial selected premium option:
Premium Option A DL
Premium Option B_____

Name as it appears on Appendix A or B_____

PEPSI-COLA METROPOLITAN BOTTLING CO.

Respondents

By David D. Conway
[Name]

July 13, 1992
[Date]

Title: Manager, Operational Services

Initial selected premium option:
Premium Option A_____
Premium Option B X DDC

Name as it appears on Appendix A or B Marathon Oil Company

...sidents

By D. Michael Chapman
[Name]

10 JULY 1992
[Date]

Title: General Counsel, Vice President & Secretary

Initial selected premium option:
Premium Option A (M)
Premium Option B

Name as it appears on Appendix A or B Samsonite Corporation

Respondents

By Michael C. Goldberg Michael C. Goldberg July 9, 1992
[Name] [Date]

Title: Vice President

Initial selected premium option:
Premium Option A_____
Premium Option B mcg

Name as it appears on Appendix A or B ALLIED TRADES, INC. D/B/A BARNETT LUMBER CO.

Respondents

By _____ 7/24/92
[Name] [Date]

Title: Attorney for

Initial selected premium option:
Premium Option A ____
Premium Option B ✓

Name as it appears on Appendix A or B Burlington Northern Railroad Company

Respondents

By Wayne T. Fisher July 6, 1992
[Name] [Date]

Wayne T. Fisher

Title: Senior Vice President

Initial selected premium option:
Premium Option A_____
Premium Option B_____ WTF WTF

Name as it appears on Appendix A or B CAMP DRESSER & McKEE INC.

Respondents

By _____ July 9, 1992
[Name] Robert M. Novotny [Date]

Title: Vice President - Operations

Initial selected premium option:
Premium Option A x (V
Premium Option B _____

Name as it appears on Appendix A or B ASARCO INC. GLOBE PLANT

Respondents

By Gene Seibach 7-13-92
[Name] [Date]

Title: SR V.P. OPS

Initial selected premium option:
Premium Option A _____
Premium Option B X JA

Name as it appears on Appendix A or B Cord Laboratories Inc

Respondents

By Thomas W. Beggs [Name] Thomas W. Beggs — July 9, 1992 [Date]

Title: Director, Corporate Environmental Services

Initial selected premium option:
Premium Option A ____
Premium Option B JWB

Name as it appears on Appendix A or B Smith-Kline Beckman Corporation

Respondents Lowenstein Theatre
Denver Center for the Performing Arts - lessee of theatre
Helen G. Bonfils Foundation - owner of theatre

By _____ July 15, 1992
[Name] Lester L. Ward [Date]

Title: President-Denver Center for the Performing Arts
Secy/Treasurer-Helen G. Bonfils Foundation

Initial selected premium option:
Premium Option A _____
Premium Option B XX

Name as it appears on Appendix A or B Lowenstein Theatre/DCPA

Respondents

By William Reichenberg
[Name]

July 17, 1992
[Date]

Title: President

Initial selected premium option:
Premium Option A_____
Premium Option B WR

Name as it appears on Appendix A or B Vallevlab, Inc.

Respondents

By _____ July 20, 1992
[Name] George R. Larsen [Date]

Title: Acting Director
Environmental Management Department

Initial selected premium option:
Premium Option A X
Premium Option B _____

Name as it appears on Appendix A or B Martin Marietta Corporation - Astronautics Group

Respondents

By Victor J. Ross — June 29, 1992
[Name] [Date]
Victor J. Ross, Ed.D.

Title: Superintendent

Initial selected premium option:
Premium Option A _____
Premium Option B X

Name as it appears on Appendix A or B Adams-Arapahoe Joint District No. 28J (Aurora Public Schools)

Respondents

City of Colorado Springs

By _____ July 16, 1992

[Name] [Date]

J. Martin Thrasher
Director, Environmental Services Department
Colorado Springs

Title: Utilities

Initial selected premium option:
Premium Option A _____
Premium Option B X

Name as it appears on Appendix A or B City of Colorado Springs

APPROVED AS TO FORM:
UTILITIES ATTORNEY

Respondents

By _____ July 22, 1992
[Name] [Date]

Title: Environment & Safety Engineering Vice President

Initial selected premium option:
Premium Option A_____
Premium Option B AT&T

Name as it appears on Appendix A or B AT&T

Respondents

By Peter J. Neidecker
[Name]

July 16,1992
[Date]

Title: President

Initial selected premium option:
Premium Option A_____
Premium Option B X

Name as it appears on Appendix A or B National Wire and Stamping, Inc.

Respondents

By _____ 16 September 1992
[Name] [Date]
JOHN N. STEWART, Colonel USA

Title: Commander, DRMS on behalf of Defense Logistics Agency

Initial selected premium option:
Premium Option A_____
Premium Option B X

Name as it appears on Appendix A or B United States Defense Logistics Agency

Respondents

By _____ September 10, 1992
(Name) (Date)

Title: Acting Assistant Chief Hydrologist for Operations

Initial selected premium option:

Premium Option A X
Premium Option B _____

Name as it appears on Appendix A or B:

Alberto Condes

Respondents

By Gerald H. Yamada 9/17/92
[Name] [Date]

Title: Principal Deputy General Counsel

Initial selected premium option:

Premium Option A ____
Premium Option B X

Name as it appears on Appendix A or B:

U.S. EPA REGION VIII LAB

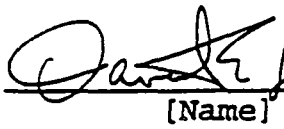
Respondents

By _____ Sep 14 1992
[Name] [Date]

Initial selected premium option:
Title: Dep Asst Sec of AF (FMO) Premium Option A_____
Premium Option B_X_

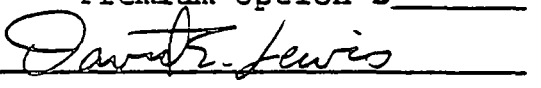
Name as it appears on Appendix A or B U.S. Air Force

Respondents

By  August 3, 1992
[Name] [Date]

Title: Assistant Secretary for Acquisition and Facilities

Initial selected premium option:
Premium Option A OS
Premium Option B

Name as it appears on Appendix A or B 

Respondents

By Eugene H. Essen [Name] 9/11/95 [Date]

Title: Deputy Director of the Mint

Initial selected premium option:

Premium Option A X
Premium Option B ___

Name as it appears on (Appendix A) or B:

US Mint, Department of the Treasury

Appendix B

LIST OF SETTLEMENT AMOUNTS
Including Premium In Lieu Of Cost Recover-Option B

The Settlement Amount for each Respondent choosing Option B is calculated as follows:

$336,000,000 x 3.0 x (Volume of Waste Material) = Settlement Amt.
142,295,420

LOWRY LANDFILL DE MINIMIS SETTLEMENT
APPENDIX B

LOWRY LANDFILL DE MINIMIS PRPS SETTLING ON OPTION "B" (2.0 PREMIUM)	VOLUME (GALLONS)	BASE AMOUNT	SETTLEMENT AMOUNT
1 ADAMS ARAPAHOE JOINT DISTRICT NO. 28J (AURORA PS)	96.00	$361.92	$1,085.76
2 ALLIED TRADES, INC., D/B/A BARNETT LUMBER CO	200.00	$754.00	$2,262.00
3 AT&T IND., INC.	500.00	$1,885.00	$5,655.00
4 BURLINGTON NORTHERN RAILROAD	220.00	$829.40	$2,488.20
5 CAMP DRESSER & MCKEE, INC.	795.00	$2,997.15	$8,991.45
6 CITY OF COLORADO SPRINGS	172.50	$650.33	$1,950.98
7 CORD LABORATORIES, INC.	7,026.00	$26,488.02	$79,464.06
8 LOWENSTEIN THEATRE/DCPA	2.50	$9.43	$28.28
9 MARATHON OIL COMPANY	100.00	$377.00	$1,131.00
10 NATIONAL WIRE AND STAMPING, INC.	543.00	$2,047.11	$6,141.33
11 SMITH-KLINE BECKMAN CORPORATION	550.00	$2,073.50	$6,220.50
12 U.S. AIR FORCE	10,333.00	$38,955.41	$116,866.23
13 U.S. DEFENSE LOGISTICS AGENCY	2,145.00	$8,086.65	$24,259.95
14 U.S. EPA REGION VIII LAB	125.00	$471.25	$1,413.75
15 VALLEYLAB, INC.	375.00	$1,413.75	$4,241.25
TOTAL	23,183.00	$87,399.91	$262,199.73

Appendix A

LIST OF SETTLEMENT AMOUNTS
Including Premium for Settlement-Option A

The Settlement Amount for each Respondent choosing Option A is calculated as follows:

$536,000,000 x 1.5 x (Volume of Waste Material) = Settlement Amt.
142,295,420

LOWRY LANDFILL DE MINIMIS SETTLEMENT
APPENDIX A

LOWRY LANDFILL DE MINIMIS PRPS SETTLING ON OPTION "A" (0.5 PREMIUM)	VOLUME (GALLONS)	BASE AMOUNT	SETTLEMENT AMOUNT
1 ASARCO INC. GLOBE PLANT	3,600.00	$13,572.00	$20,358.00
2 MARTIN MARIETTA CORPORATION-DENVER AEROSPACE	16,795.00	$63,317.15	$94,975.73
3 PEPSI-COLA BOTTLING COMPANY	2,717.00	$10,243.09	$15,364.64
4 SAMSONITE CORPORATION	5,395.00	$20,339.15	$30,508.73
5 USGS NWQ LABORATORY	10,835.00	$40,847.95	$61,271.93
6 U.S. MINT, TREASURY DEPARTMENT	7,600.00	$28,652.00	$42,978.00
7 U.S. VETERANS ADMINISTRATION MEDICAL CENTER	18,768.00	$70,755.36	$106,133.04
TOTAL	65,710.00	$247,726.70	$371,590.05